

SEDIMENT STORAGE (Continued)

The following table summarizes the required and available sediment storage for every outfall on this project. The Contractor shall provide and maintain the storage volumes for the BMP's specified in this table.

Outfall ID	Total Drainage area (acres)	Disturbed Area (acres)	Required Sediment storage Volume (cu yd)	Total Storage volume provided (cu yd)	Sediment Basins		Check Dam (cu yd each)		Silt Fence		Inlet Sediment Trap	
					Pond *	Storage Volume (cu yds)	* of Devices	Storage Volume (cu yds)	Ln Feet	Storage Volume (cu yds)	* of Devices	Storage Volume (cu yds)
A	27.45	2.55	1839.15	22.4			14	22.4				
B	57.32	10.21	3840.64	1879.23	1	1675.08	63	97.8	645	96.75	4	9.6
C	0.19	0.08	12.73	3.2			2	3.2				
D	1.42	0.71	95.14	11.2			7	11.2				
E	54.44	7.33	3647.48	248.25			76	109	875	131.25	5	8
F	0.60	0.21	40.20	67.5					450	67.5		
G	16.18	3.46	1084.06	145.55			25	36.4	685	102.75	2	6.4
H	20.16	5.08	1350.72	102.4			41	92.8			6	9.6
I	8.00	3.72	536	5878.4	2	5821.2	36	49.2			5	8
J	17.77	5.59	1190.59	65.4			61	54.2			5	11.2
K	2.79	1.44	186.93	513					3420	513		
L	5.58	5.94	373.86	750.4			31	31.6	4760	714	3	4.8
N	2.52	1.58	168.84	425.8			4	4	2780	417	3	4.8
M	0.90	0.44	60.3	205.6					1360	204	1	1.6
O	9.18	5.73	615.06	342.65			38	38	1967	295.05	6	9.6
P	0.84	0.31	56.28	40.05					235	35.25	3	4.8
Q	0.81	0.72	54.337	112.5					750	112.5		
R	17.91	4.91	1199.97	74.6			47	65			6	9.6
S	113.40	16.30	7597.8	7337.64	3	6807.24	146	200.6	1996	299.4	15	30.4
T	14.64	5.75	980.88	185.4			53	70.4	660	99	8	16
U	2.72	2.54	182.24	32.8			22	28			3	4.8
V	1.38	1.03	92.46	89.2			7	11.2	520	78		
W	3.68	2.97	246.56	105.4			27	31.8	480	72	1	1.6
X	2.45	1.94	164.15	168.7			12	16.8	970	145.5	2	6.4
Y	6.16	5.58	412.72	117.9			47	60.2	310	46.5	5	11.2
Z	2.09	1.22	140.03	73.9			4	6.4	450	67.5		
AA	1.67	1.67	111.89	135					900	135		
BB	13.21	8.07	885.07	311.6			105	133.8	1100	165	6	12.8
CC	4.05	1.98	271.35	108.1			9	13.2	590	88.5	2	6.4
DD	10.85	4.86	726.95	203.35			32	41.6	1025	153.75	3	8
EE	0.60	0.37	40.2	60					400	60		
FF	3.90	3.90	261.3	130.4			24	31.2	640	96	2	3.2
GG	19.30	8.18	1293.10	144.6			73	23.8	720	108	6	12.8
HH	7.40	3.15	495.8	95.5			20	30.2	350	52.5	4	12.8
II	13.50	4.80	904.5	210.4			67	58	920	138	5	14.4
JJ	127.58	8.11	8547.86	1928.48	4	1853.28	54	62.4			6	12.8
KK	7.32	2.38	490.44	65.6			25	35.2	160	24	2	6.4
LL	3.14	0.97	210.38	72.9			11	14	350	52.5	2	6.4
MM	254.22	6.36	17032.74	2374.35	5	2138.4	68	91.4	825	123.75	9	20.8
NN	25.13	2.45	1683.71	144.9			10	12.4	830	124.5	3	8
OO	4.05	2.40	271.35	46.4			29	40			2	6.4
TOTAL	885.40	156.98	59322.07	25019.45		18295.20		1599.40		4818.45		289.60

TOTAL DRAINAGE AREA - 885.40 ACRES
TOTAL DISTURBED AREA - 156.98 ACRES
TOTAL PROJECT AREA - 271.26 ACRES

Site Runoff Coefficient -
Pre Construction - 0.24
Post Construction - 0.28

In order to prevent runoff from bypassing Inlet sediment traps,a temporary berm shall be installed on the downstream side of all Inlet sediment traps that are not located in a low point or an excavated sump.Temporary berms,when necessary,shall be a minimum of 18" high and constructed in a manner that ensures stormwater does not bypass the Inlet.The contractor may submit alternate temporary containment berm designs to the Project Engineer for approval.

READY MIX CHUTE WASH-DOWN

The washing of ready-mix concrete drums and dump truck bodies used in the delivery of portland cement concrete is prohibited on this site.In accordance with standard Specification 107 - Legal Regulations and Responsibility to the Public,only the discharge "chute" utilized in portland cement concrete delivery may be rinsed free of fresh concrete remains.The Contractor shall excavate a pit outside of State water buffers,at least 25 feet from any storm drain and outside of the travel way,including shoulders,for a wash/pit area.The pit shall be large enough to store all wash-down water without overlapping the pit.Immediately after the wash-down operations are completed and after the wash-down water has soaked into the ground,the pit shall be filled in,and the ground above shall be graded to match the elevation of the surrounding areas smoothed out. Alternate wash down plans must be approved by the Project Engineer.

Wash-down plans describe procedures that prevent wash down water from entering streams and rivers.Never dispose of wash-down water down a storm drain.Establish a wash-down water pit location that includes the following:(1) the pit is located away from a storm drain,stream or river,(2) the pit is accessible to the vehicle being used for wash-down,(3) the pit has enough volume for wash-down water,and (4) make sure you have permission to use the area for wash-down.On some sites,you may not have permission or access to a location which allows for a wash-down pit.In those cases,the Contractor may have to wash-down into a wheelbarrow or other container and carry the container for transport to a proper disposal site. For additional information,refer to the Georgia Small Business Environmental Assistance Program's "A Guide for Ready Mix Chute/Hopper Wash-down".

EROSION SEDIMENTATION POLLUTION CONTROL CHECKLIST:

See Sheet 51-003

MONITORING SAMPLING METHODS & PROCEDURES

See Special Provision 167 and other contract documents for Monitoring Sampling Methods and Procedures.

MONITORING GENERAL NOTES:

Representative sampling may be utilized on this project.The characteristics of the individual watersheds along the project corridor have been carefully evaluated and compared on the basis of drainage characteristics,watershed size,land disturbance and earth work. After evaluation of these items as presented in the projects drainage area maps,hydrology and hydraulic studies,construction plans and erosion sedimentation and pollution control plans,it has been determined that the increase in turbidity at the specified locations will be representative of the increase in turbidity for all waters leaving the site.Approved primary and alternate representative monitoring sites are identified in the table:

Monitoring Site	Primary or Alternate site	Location (Sta. offset and side)	Name of Receiving water.	Applicable construction stage for monitoring	Sampling Type (Outfall or Receiving Water)	Drainage Area (For the receiving water)	Total Project Area	Warm or Cold water Stream	Appendix B NTU value (Outfall Monitoring Only)	Allowable NTU Increase (For Receiving Water)	Location Description
1	Primary	146+20, 31' RT	Swift Creek	All	Outfall	27.45 acres	271.26 acres	Warm	50		Outfall
2	Primary	200+30, 96' RT	Swift Creek	All	Outfall	50.43 acres	271.26 acres	Warm	50		Outfall
3	Primary	490+70, 95' LT	Little Reedy Creek	All	Outfall	19.30 acres	271.26 acres	Warm	50		Outfall
4	Primary	543+80, 92' RT	Reedy Creek	All	Outfall	7.32 acres	271.26 acres	Warm	50		Outfall

NOTE: OUTFALL LOCATIONS SHALL MONITOR ONLY WATER FROM THE PROJECT'S CONSTRUCTION LIMITS. MONITORING LOCATIONS ARE NOT APPROPRIATE IF THEY INCLUDE WATER FROM OUTSIDE THE PROJECT LIMITS.

Note: Appendix B chart and rationale is only relevant when sampling an Outfall location

(According to the EPD,additional monitoring sites may be required depending on significant changes in typical sections)

The primary site specified should be used as the initial sampling location.The alternate sampling sites may be used if additional sampling is required and/or if the primary sampling site is no longer located within the active phase of construction.

APPENDIX B
NEPHELOMETRIC TURBIDITY UNIT (NTU) TABLES
WARM WATER (SUPPORTING WARM WATER FISHERIES)

SITE SIZE (ACRES)	SURFACE WATER DRAINAGE AREA, SQUARE MILES							
	0-4.99	5-9.99	10-0024.99	25-49.99	50-99.99	100-00249.99	250-499.99	500+
1.00-0010	75	150	200	400	750	750	750	750
10.01-0025	50	100	100	200	300	500	750	750
25.01-50	50	50	100	100	200	300	750	750
50.01-00100	50	50	50	100	100	150	300	600
100+	50	50	50	50	50	100	200	100

To use these tables,select the size (acres) of the construction site. Then,select the surface water drainage area (square miles.) The NTU matrix value arrived at from the one to use in Part III.D.4.

Example: For a site of 51.7 acres and a warm water drainage area of 72 square miles, the NTU value to use in Part III.D.4 is 100 NTU.

* Warm water streams have a 25-foot minimum buffer as measured from the wrested vegetation.Cold Water streams have a 50-foot buffer as measured from the wrested vegetation.

** Locations are approximate,a detailed location of stream buffers and authorized work areas are shown on the individual BMP sheets.

Name (name or number of feature)	Location of Buffered Streams and State Waters **			Stream Type (Warm/Cold Water) *	Buffer Impacted (Yes/No)	Buffer Variance Required?	Describe the allowable activities and/or restrictions within the buffer and approximate location of the impacts.
	Alignment	Begin Sta (Lt or RT)	End Sta (Lt or Rt)				
POND *5	US 1/ SR 4	260+92,RT	263+61,RT	Warm	Yes	Yes	The Perennial Pond is within the R/W and the impacts will be the construction of roadway embankment.
POND *10	US 1/ SR 4	299+08,RT	302+86,RT	Warm	Yes	Yes	The Permanent Pond is within the Pond Easement and the impacts will be the construction of roadway shoulder and longitudinal drainage.
STREAM * 8 - Pendleton Creek	US 1/ SR 4	278+90,LT&RT	286+10,LT&RT	Warm	Yes	No	The bridge on US 1 over Pendleton Creek will be replaced on this project along with a new parallel bridge. This buffer is exempt from needing a buffer variance,due to the construction of a new stream crossing.The Contractor is permitted to work within 100' of the outside of the bridge structure. A double row of Type C silt fence along fill slopes will be utilized to prevent sediment from leaving the project and entering the buffer.
STREAM *11a	Five Point Road	85+77,RT	86+69,RT	Warm	Yes	No	The Stream is within the R/W and the impacts will be the removal and construction of crosspipe.
STREAM *14	US 1/ SR 4	525+55,LT&RT	528+31 LT&RT	Warm	Yes	No	The Stream is within the R/W and the impacts will be the removal and construction of box culvert and ditch.
STREAM *17	US 1/ SR 4	550+64,RT	552+38,RT	Warm	Yes	No	The Stream is within the R/W and the impacts will be the removal and construction of box culvert and ditch.

GEORGIA
DEPARTMENT
OF
TRANSPORTATION



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REVISION DATES

6/8/2011 9/6/2011

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION

OFFICE: PROGRAM DELIVERY

ESPC GENERAL NOTES

US 1/SR 4 WIDENING
TOOMBS/EMANUEL COUNTIES

DRAWING No.

51-002